**Development of renewable energy**

†449. SHRI P.K. MAHESHWARI: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether Government are going to open the outlets of renewable energy in the 500 districts across the country for ensuring participation of common people in the development of renewable energy;

(b) if so, by when this scheme would be implemented; and

(c) the State-wise details of the 500 districts which have been identified for this scheme?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) to (c) The Ministry of Non-Conventional Energy Sources was earlier implementing a scheme under which 104 Aditya Solar Shops have been set up in 28 States/UTs.

The Ministry has introduced a new scheme to support the creation of network of retail outlets in the form of Akshay Urja Shops for sale and service of solar energy and other renewable energy products. The shops can be established by reputed NGOs, State Nodal Agencies, manufacturers' associations and private entrepreneurs.

It is proposed to establish Akshay Urja Shops in all the districts of the country. Initially it is planned to support the setting up of 200 shops next year in those districts where Aditya Solar Shops have not been set up under the earlier scheme.

**Incentives to the producers of solar energy**

450. SHRI K. RAMA MOHANA RAO:
SHRI RAMA MUNI REDDY SIRIGIREDDY:

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to refer to the answer to Unstarred Question 841 given in the Rajya Sabha on the 30th November, 2005 and state:

(a) what are the reasons that the Ministry has not updated the solar radiation data since 1982;

† Original notice of the question was received in Hindi.

(b) the details of solar energy produced during the last three years, year-wise and State-wise;

(c) the incentives that Government are giving to the producers of solar energy; and

(d) whether any target has been set to reach the villages with solar energy whereas the conventional power has not yet been reached?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) Measurement of weather data including that of solar radiation is a regular activity of the India Meteorological Department (IMD). Based on the measured data for 10—15 years, IMD had brought out two handbooks containing average values of solar radiation data for various locations in the country for use by solar energy professionals. In order to update this data based on the measurements carried out since 1990, the Ministry has taken up a project with IMD, which will conclude during the year.

(b) The Solar Energy Programme implemented by the Ministry deals with electricity generation through solar photovoltaics (SPV) and generation of heat for solar thermal applications. State-wise and year-wise details of installation of grid connected SPV power plants and the estimated power generation for the last three years are given in the Statement (*See* below). In addition, a total of 75691 home lighting systems, 5093 solar street lighting systems, 35374 solar lanterns, 22317 solar pumps, and stand alone power plants of aggregate capacity of 408 kWp were also installed in the country during the last three years.

The programme for water heating applications is implemented through banks and other financial institutions through out the country. A total solar collector area of 1.0 lakh, 1.5 lakh and 2.0 lakh square meters has been installed during the years 2002-03, 2003-04 and 2004-05, respectively.

(c) The Ministry has been implementing comprehensive programmes on research and development and utilization of solar energy in the country. In addition, number of incentives like subsidy, soft loan, 80% accelerated depreciation, concessional duty on import of raw materials and certain products, excise duty exemption on certain devices/systems etc. are being provided by the Government for the production and use of solar energy systems.

(d) During 10th Plan, a target for electrification of 5000 villages has been set by the Ministry through its programme for "electrification of remote unelectrified census villages and unelectrified hamlets of electrified census villages" where grid connectivity will either be not feasible or not cost effective. For this, a variety of non-conventional energy technologies including the solar energy systems are being deployed depending upon local availability of resources and cost effectiveness.

***Statement***

*Year-wise and State-wise Grid Interactive Solar PV Power Plant installations*

| Sl.No. | State/UT | Solar PV power plants (kWp) | | |
|---|---|---|---|---|
| | | 2002-03 | 2003-04 | 2004-05 |
| 1 | Arunachal Pradesh | 0 | 0 | 25 |
| 2 | Punjab | 200 | 0 | 25 |
| 3 | Rajasthan | 0 | 0 | 100 |
| 4 | Uttaranchal | 0 | 50 | 0 |
| 5 | Andaman & Nicobar | 50 | 0 | 50 |
| 6 | Lakshadweep | 250 | 0 | 100 |
| 7 | Pondicherry | 0 | 0 | 25 |
| | TOTAL: | 500 | 50 | 325 |
| | Estimated power generation (million kWh/year) | 0.60 | 0.66 | 1.05 |

**Villages without electricity in Madhya Pradesh**

451. SHRI EKANATH K. THAKUR: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether it is a fact that about 25,000 villages in India, of them, 1,300 in Madhya Pradesh alone, will not be connected to the grid by 2012;